CHILD WELFARE DIGITAL SERVICES (CWDS) UPDATE



VISION STATEMENT

"We will establish and maintain an innovative statewide 21st century information technology application that aids child welfare stakeholders in assuring the safety, permanency, and well-being of children at risk of abuse and neglect."

Child Welfare Digital Services (CWDS) is a software product development organization within the Office of Systems Integration (OSI), which is responsible for two systems: The Child Welfare Services / Case Management System (CWS/CMS) and the Child Welfare Services-California Automated Response and Engagement System (CWS-CARES). In November 2015 the CWS-CARES Project embraced an agile approach to software design and development. Rather than procuring a monolithic, one-time solution, we will instead develop and integrate a suite of digital services through which we can deliver continually improving support and assistance.

HIGHLIGHTS

The Project completed documenting high-level functional areas and building blocks for the Product Blueprint and Domain Model. These artifacts are living documents and will continue to be refined as needed. The Project also continued its work on Child and Adolescent Needs and Strengths Assessment (CANS) 2.0 which is planned for release on June 1, 2019. This update to CANS will allow for reassessment of cases, improve user functionality, and provide more reporting metrics. The team also made progress with tuning Search results and with reducing Search pipeline latency to the target metric of 10 seconds or less. While CANS will benefit from these improvements, more testing is being completed to insure these latency reduction measures will be enough to release Snapshot to a larger group of users.

The Project hosted Visioning Engagement activities to refine the research on Platform as a Service (PaaS) by hosting two, two-day workshops the week of April 15: one with Microsoft and one with Salesforce. The purpose of these sessions was to learn about any possible constraints that the vendors' software might have in accommodating the CARES Product Blueprint requirements. CWDS requested that the vendors provide information about the extent of functions and capabilities that could be configured "out of the box" and those that require the use of the platform's custom development tools. CWDS is also seeking information from these vendors about software licensing and licensing costs.

The Project continued to work on the Annual Advanced Planning Document (APDU) and the Special Project Report (SPR), and submission of these project documents will be delayed until approval is obtained regarding the Project Acceleration Strategy. It is anticipated that these two reports will be submitted in May 2019.

The current count of registered users of CARES is 3,200; 1,579 of which are users of the CANS features. The total number of CANS records has increased to 84 completed assessments, with 29 pending assessments.

KEY PROJECT MILESTONES

Milestone	Planned Finish Date	Actual Finish Date	Status	Notes
Release CARES 2.3	04/2019		In Progress	CWDS will deploy CARES 2.3 on 4/27/2019, which is targeted to include IDM 1.4 and Facility Search 1.2.
Release CARES 2.4	06/2019		In Progress	CWDS is planning to deploy CARES 2.4 on 6/1/2019 that will include CANS 2.0 which creates the CANS re-assessment form.
Procure Implementation Services Contract II	12/2018		Pending	The Implementation Services will prepare counties and tribes for the rollout of Digital Services. Bid evaluations were completed the week of 2/4/2019. Contract was approved by OSI Legal on 2/22/2019 and is awaiting ACYF final approval of contract. In a letter received from ACYF, the state was directed to submit a revised Implementation Services contract in coordination with the upcoming APD, or after the outstanding project decisions are made to clarify the vision, plan, and funding for the project.
Procure IT Operations Advisor	5/2019		In Development	Drafting Statement of Work (SOW)
Procure Information Security Service	4/2019		In Progress	The SOW is currently in review with management
Procure JIRA Project Scheduler	3/2019	4/8/2019	Completed	Contract awarded on 4/8/2019. Employee started on 4/15/2019
Procure Communications Advisor	5/2019		In Development	Drafting SOW

Note: With the focus on one product feature set at a time, the Project has temporally suspended use of Product Increment (PI) Planning until further notice. During this time, the Project will work on determining the best planning strategy that will allow for proper planning and further Project development.

APRIL 1-15, 2019

DIGITAL SERVICE UPDATE

Product Feature/Service

Progress to Date

The **Case Management** digital service will provide county Child Welfare Agencies a comprehensive, automated case management system that fully supports the child welfare practices and incorporates the functional requirements mandated by federal regulations. The CANS product feature set is a component within Case Management.

CANS is a key strategy for the Integrated Core Practice Model (ICPM) and a pivotal aspect of Continuum of Care Reform (CCR). CANS will help set and track progress towards behavior goals, supporting better placement matching and faster progress to safe permanency.

CANS 2.0

CANS 2.0 will included regression testing updates to comply with Page Object Model (POM) and will automate CANS test scripts in all CARES environments to eliminate the need for manual testing. Included in CANS 2.0 is:

Improve usability

- User can add ratings
- Require delete reason
- Add DOB & age to assessment form
- Collapse option at bottom of expanded items
- Page automatically scrolls when domain is expanded
- CANS status in client history
- AKAs on search results
- Saving data on page

Refine CANS Assessments

 CANS reassessment is populated with ratings from previously completed assessment. This will eliminate duplicate data entry and to reduce the amount of time spent entering assessment data.

Capture county CANS application metrics.

- Create reports in New Relic to capture metrics that identify how users interact with the CANS application including:
 - Length of time a user takes to complete an assessment
 - Number of deleted records and the delete reason.

- Immediately after CANS 1.1 was released to production in Feb 2019 we began developing CANS 2.0, which caused us to update the CANS regression test scripts. In the beginning of April, the team continued work on CANS 2.0 including continuous updates regression test scripts to maintain the quality of the product.
- Updated comment field to show icon when a comment is present in assessment field.
- Users can access the change log from the assessment form
- Developed a "delete reason" pop-up when deleting information from assessment.
- Made update to supervisor dashboard to disable staff when no cases are active.
- Started work to update the case worker dashboard to show an Information icon next to "Reassessment Reminder Date" column header
- Started work to update the Supervisor Dashboard to add "Reassessments Needed" column
- Created ability to carry over prior ratings to reassessment form
- Completed development of deleted records metrics in New Relic.

Implementation

There were no implementations during this reporting period.

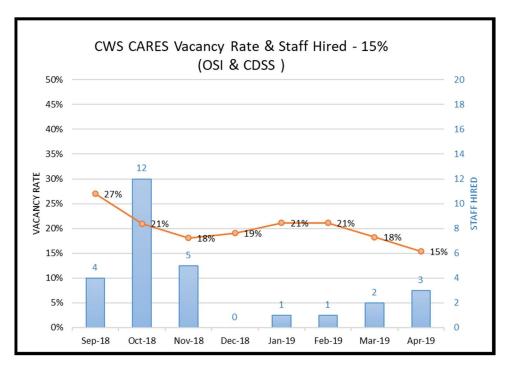
Foundational Technical Tasks Extend Identity Management (Cognito) Progress Status **Identity Management 1.4** In Progress – 90% This is in Hardening and Validation New workflows to add and support users who do not have a Process (Production Ready 4/3/19) CWS/CMS login and is targeted for CARES 2.3 release User role and privilege management for local administrators on 4/27/19. User data set to assist with user creation and validation processes Further refinement of Global, State, County and Office administrator's roles/permissions User/Role access restrictions **Security Infrastructure Progress Status** Postgres database auditing Audit logs are currently being manually In Progress - 70% Deliverable - ensure all audit logs are saved and extracted from our PostgreSQL archived. databases and stored in an S3 bucket Web gateway hardening via a scheduled job within each application environment. This is an

Product Feature/Service	ı	Progress to Date
 Deliverable - Implement Secure Technical Implementation Guidelines for Apache Server. Database improvements Deliverable – create unique database credentials for 		interim step until the databases can be upgraded to a patched version that supports direct logging to AWS CloudWatch Logs.
CANS.	In Progress – 60%	We are developing standards, in accordance with CDT policy to incorporate an approved security standard. These standards have not yet been applied.
	In Progress – 70%	Database credentials are currently being managed at the database application.
Improve Pipeline/Factory Improvement Team (FIT)	Progress	Status
Build process automation Deliverable – automation of manual build steps and processes including smoke tests, code quality scanning, licensing validation, security scans and integration testing.	In Progress – 70%	Applied the new shared library for smoke testing Built Jenkins PR Pipeline
Deployment process automation Deliverable – automation of deployment steps and processes including browser tests, performance tests, database structure change process, load tests and release notes.	In Progress – 30%	Developed a rollback tool that when a build step fails in the release pipeline, it rolls back to the prior environment for correction.
Configuration management Deliverable – automate deployment checklist, standard pull request process and developer quick start introduction.	In Progress – 50%	Ensured that all health check codes are running in all CARES environments (testing, demo, training, etc.)
Code Quality	Progress	Status
Code analysis Deliverable – fully implement and configure SonarQube/code climate and ensure all code checked into the pipeline is scanned.	In Progress – 90%	Continued work on all code issues. This will be an ongoing process as code is continuously checked.
Product Blueprinting and	Progress	Status
 Domain and Data Architecture Approach Develop, in concert with the Product Blueprinting initiative, the new CARES Domain Model Deliverable – domain model, specified in UML class model notation, supporting all child welfare processes, including Hotline, Investigations, Case Management, Courts, Licensing, Resource Management, Eligibility, Financials and Administration. The model will also reflect the populations and metrics required to produce Federal and state reports and manage to statewide indicators. Conduct, in concert with ongoing legacy (CWS-CMS) data quality analysis, a CARES continuous data quality monitoring proof of concept. Deliverable – proof of concept demonstrating how New Relic (and/or other tools) can be used to instrument the CARES product to measure data quality, including data entry lag, and alert users to take corrective action. 	Cancelled – 50%	Completed first-pass top-level Product Blueprinting efforts. This included a week-long review, with DesignOps, Data Architects and SMEs, of the domain models for Intake through Resource Management. The goal was to close any gaps, clarify relationships and identify areas for further research, especially related to analytics. Developed a Value Hypothesis Matrix to capture, based on Program guidance and the Core Practice Model (CPM), outcome, practice and process metrics for each Building Block, from Hotline through Case Management. This analysis will be important to prioritizing and sequencing Building Blocks on our Product Roadmap Work effort was redirected to focus on CARES Domain Modeling with emphasis on improvements over the legacy model that will prevent the creation of duplicate records in CARES.

NOTE: Any work completed in the prior month will remain in the table for the following reporting period. Example: if completed in February it will be reflected in March report and will be removed in April report.

STAFFING VACANCY

CURRENT VACANCY RATE: 15%



Current Vacancies - 16 of 104 CWS-CARES positions. The CWS-CARES vacancy rate decreased from 18% to 15% as three OSI positions were filled as of April 15, 2019.

Entity CWS- CARES	Classification	Service Team	Date Vacant	# of Days Vacant	Efforts/Notes
OSI	Information Technology Associate	Developer	7/1/2017	654	Position on hold
OSI	Information Technology Associate	Project Management Analyst	1/24/2019	82	HR is reviewing revised duty statement
OSI	Information Technology Associate	Service Desk Analyst	2/1/2019	74	Interviews are being scheduled for week of 4/12/19
OSI	Information Technology Associate	Security Analyst	7/1/2017	654	Interviews are being scheduled for week of 4/12/19
OSI	Information Technology Manager I	Product Planning Chief	7/1/2017	654	Position on hold
OSI	Information Technology Specialist I	Developer	7/1/2017	654	Position on hold
OSI	Information Technology Specialist I	Information Security Analyst	7/1/2017	654	Position on hold
OSI	Information Technology Specialist I	Developer	7/1/2017	654	Position on hold
OSI	Information Technology Specialist I	Application Architect	7/1/2017	654	Position on hold
OSI	Information Technology Specialist I	Developer	7/1/2017	654	Position on hold
OSI	Information Technology Specialist II	DevOps Engineering	7/1/2017	654	Position on hold
OSI	Information Technology Specialist II	Application Architect	7/1/2017	654	Position on hold
OSI	Information Technology Supervisor II	Data Management	7/1/2017	654	Position on hold
CDSS	AGPA	Administrative Support	9/25/2018	203	Position posted 3/27, Final Filing Date (FFD) 4/4/19
CDSS	AGPA	Administrative Support	10/12/2018	186	Position posted 3/27, FFD 4/4/19
CDSS	AGPA	Administrative Support	9/1/2018	227	Position pending re-org
Filled Positions					
osi	Information Technology Specialist I	Senior Project Manager	12/3/2018	134	Official start date is 5/2/19
OSI	Information Technology Specialist I	Senior Project Manager	1/12/2019	94	Official start date is 4/15/19
OSI	Information Technology Specialist I	Contract and Procurement Analyst	2/21/2019	54	Official start date is 4/22/19

RISKS

For this reporting period there are three High Priority risks open. Of those, one was carried over from prior month and two new risks were added. The below table provides details for each risk being actively managed by the PMO.

Risk	Impact	Mitigation
Opened Risks		
CWS-CARES lacks guidance on establishing coding standards and practices for the Digital Service (DS) teams. Vendors are independently determining standards and grading their own code with no enterprise level standards to adhere to. RI-111	This may lead into a grading system for code quality that is not reliable and poor-quality product with high technical debt migrated to production. CWDS technical leadership should consider dedicating efforts to establish these standards and a mechanism to monitor adherence to these standards. The examples of what needs to established may include: • Code quality reporting targets • CQ monitoring process • Functional testing goals • Non-functional testing goals (such as performance and other SLO)	CWS-CARES technical leadership must develop a clear and concise mechanism for best practices for coding and standards that need to be met to maintain a high quality of code. This should be communicated to the DS teams and monitored to verify adherence to established standards. Progress as of 4/15/19: • The Code Quality team has documented CWDS Developer Standards and expectations along with basic guidance. The intent of the document is to define developer responsibilities and create a standard set of procedures amongst the development groups to increase code quality and promote a common set of values among teams/vendors. Each developer can then explicitly understand what is expected and can contribute positively to the project. • IV&V will start review of the CWDS Developed standards and code this week. It is expected this assessment will take approximately two weeks and closure of this risk (upon successful validation) is targeted for May 2019
The project's efforts to-date to formally communicate the principles and items associated with its Customer Value Measurement Process have been limited.	The continued lack of a Customer Value Measurement Process could cause multiple digital service teams to have a different understanding of how the project is measuring customer value. Service teams might not be making choices to maximize customer value. Backlog items might not be correctly prioritized. The project county stakeholders are not appraised of potential value.	 Identify value measurement metrics and tools needed to obtain metrics. (Usage Metrics completed) Create metric reports and provide to leadership regularly. (Complete) Develop customer survey/feedback process. (In progress) Include measures/metrics as part of blueprint, incorporate into research and design, as well as adding measurable value statements into user stories. (In progress) Develop process for monitoring the results of the value assumption when the code is in production (and/or Sandbox). Create Sandbox environment for training and feedback (In progress) Include in feedback process *#3 above
Continued Risks		
The current approach to the two-factor authentication is to use a code sent via an e-mail to the user, which can be restricting for County workers when email outages occur. RI-35	In the event of a County e-mail outage, the child welfare workers may not have access to the CWS-CARES system. As designed, their initial logon is tied to another system that is different in each County.	 CWDS Security Officer to Contact CDSS Security Officer to approve rolling back to one factor authentication. Roll back to one factor authentication. Research alternate authentication methods with counties that can be selected by the user at the time of the login (phone call, text, e-mail). Communicate to all stakeholders how and when to use these options.

ISSUES

For this reporting period, there are twelve High Priority issues open. Of those, ten were carried over from prior month, two new issues were added, and two issues were closed. The below table provides details for each issue being actively managed by the PMO.

Issue	Impact	Resolution
Closed Issues		
Without a definition of "Done" established for the Blueprint, measurement of the Project's progression on the Roadmap is difficult to gauge. RI-56 Closed: 04/08/2019 Reason: The definition of done has been completed as detailed in the updates on 02/11/19 and the definition was communicated via multiple channels including All Staff meetings. Closing this risk as all resolution steps are complete.	Difficulty for the Blueprint to define the project's as-is (Where are we now?) and to-be (Where are we going?) states, as well as identify enterprise level needs, approaches, and solutions (How do we get there?).	Obtain a definitive decision on the definition of "Done." Communication of decided definition to all teams on Project.
Without a definition of "Done" established for the Legacy Strategy, measurement of the Projects progression on the Roadmap is difficult to gauge. RI-57 Closed: 04/08/2019 Reason: The definition of done has been completed as detailed in the updates on 02/11/19 and the definition was communicated via multiple channels including All Staff meetings. Closing this risk as all resolution steps are complete.	Difficulty to define the project's as-is (Where are we now?) and to-be (Where are we going?) states, as well as identify enterprise level needs, approaches, and solutions (How do we get there?).	Obtain a definitive decision on the definition of "Done." Communication of decided definition to all teams on Project.
New Issues		
Release timeframes are not derived from analysis of project historical data/performance metrics, but rather were based on key staff professional opinion and management commitments. RI-115	Release timeframes will not be accurate in the absence of historical data/performance metrics.	 IPO recommends that the project instead use an Agile, data driven method such as the following: For each product feature, ensure its associated backlog is refined/pointed. Using each team's established velocity, determine the number sprints needed to complete the backlog.
The complicating factor of following a typical Agile practice of releasing and iterating improvements on an MVP is that child welfare workers cannot be expected to incorporate incomplete or insufficient features into their daily work. So, our team has given more consideration to releasing either complete (though potentially improvable) features or end-to-end workflows. RI-113	County expectations on product releases may not be met.	IPO believes two definitions may be needed. One definition for functionality that exists today in the legacy system being replicated in CWS-CARES, and one definition for purely new functionality (i.e., functionality that doesn't exist in legacy). IPO further recommended the definitions be memorialized within the next 30 days. The agreed upon definitions should also be shared with external project stakeholders to reduce the risk of misunderstanding.

Issue	Impact	Resolution
Continued Issues		
Timely decisions on future releases, need protocol for future releases RI-114	Not making these decisions in a timely manner may cause inadequate release planning to occur, resources may be assigned to tasks not aligned with project priorities.	The project must establish a practice of making decisions on future release product composition and delivery timing no later than two Sprints prior to the release currently in progress.
There is no project documentation that states the principles or items that were taught in the release planning sessions RI-112	The lack of release planning documentation could cause: the multiple digital service teams to have a different understanding of how the project is approaching product releases. The understanding of project releases to change based on turnover. The project county stakeholders to not be prepared for a release because they will not know when or what is included in a release; a release to be approved without the appropriate county representation; a release to be approved without the appropriate project governance	A Release Management Plan should be developed to define the processes and procedures expected during the release planning process
Lack of dedicated QA Automation Engineering Resources RI-105	The lack of dedicated QA Automation engineering resources to support the automate test scripts and support CWDS automation tests in the future (integration tests, and regression tests) limits the quality and overall coverage of tests performed against the system	Manual QA engineers and Development teams to create automated test scripts in Selenium based on happy path regression testing scenarios within pre-int and int environments. Adjust scripts with any additional updates needed to run in production like dataset. Identified QA and Development resources to run automated test scripts during Sprint and work to resolve any SEV 1 defects.
Information regarding test processes and procedures, plan testing activities, and status reports of quality assurance (QA) activities are not being reviewed directly by project leadership when determining the readiness of software for release. RI-95	Potential impact on quality of software being released.	Adoption of an enterprise test management tool to store test processes and procedures, plan testing activities, and status reports of quality assurance (QA) activities.
A few incidents were reported with the release of CARES 2.0 that impact the accuracy and displaying of current data in search results and in Snapshot cards. Communication was sent to the Orgs when a fix was identified for the underlying problem, not when the incidents were identified as impacting search results and Snapshot information. Impacts of using this inaccurate data potentially impact child safety. RI-92	If users are not notified in a timely manner of high priority and critical bugs in CWS-CARES, this could affect decisions made by CWS-CARES users based on inaccurate data which may ultimately impact child safety.	Solidify internal communication framework Follow communication protocols to notify users regarding bugs ranked high and critical Provide updates to users on potential interim processes and planned hot fix dates Daily prioritization of bugs
There is currently only one resource supporting the IDM solution as a Subject Matter Expert (SME) and that resource is a contractor. In the event of the contractor potentially transferring off the Project, the IDM Solution would possibly lose support on a SME level.	Since there is only one technical subject matter expert (SME) to support the solution and that this resource is a contractor, raises concerns going forward with the project's ability to support the IDM solution	Ensure an exit strategy clause is included in vendor contracts. Implement a knowledge transfer process to be executed continually throughout Project.
Lack of a defined trigger date and scope lock for a release from the Development Team is impacting the Implementation Team's ability to initiate preparation activities, e.g., communication, training materials and OCM activities	Organizations may not have time to prepare for or execute OCM, training, and implementation activities. This may result in an organization delaying the use of functionality if they are not prepared. This may also cause more organizations to stack within a given timeframe, limiting the implementation team's ability to support the organizations while they transition from CWS/CMS to the Intake Digital Service.	1. Adherence to "hands off code" as defined in the Product Release Roadmap will enable the Implementation Team to have full understanding what is in the release, who is impacted, the extent of the impacts, and provide the counties with the appropriate information for preparedness activities and a predictable implementation schedule. 2. Prevention of scope creep to ensure delivery and all supporting implementation preparedness materials (trainings, business process impacts, audience analysis, readiness activities) aligns with communication to CARES users.

Issue	Impact	Resolution
Continued Issues		
There is no formal process in place to ensure knowledge is transferred from vendors to state staff during the vendors transition off the Project as their contracts approach expiration. RI-81	Crucial Project specific knowledge is lost when backups are not identified nor a process in place to transfer knowledge between vendors and state staff.	Ensure an exit strategy clause is included in vendor contracts. Implement a knowledge transfer process to be executed continually throughout Project."
There are no quantitative and qualitative measures defined and being applied as Go/No-Go criteria for determining releases of Minimum Viable Products (MVPs). RI-85	Project will have difficulty in determining product build priorities and sequencing, as well as measuring customer satisfaction and ensuring County adoption of the delivered product.	 Identify value measurement metrics and tools needed to obtain metrics. (Usage Metrics completed) Create metric reports and provide to leadership regularly. (Complete) Develop customer survey/feedback process. (In progress) Include measures/metrics as part of blueprint, incorporate into research and design, as well as adding measurable value statements into user stories. (In progress) Develop process for monitoring the results of the value assumption when the code is in production (and/or Sandbox). Create Sandbox environment for training and feedback (In progress) Include in feedback process (#3 above).
The current process to support decisions regarding prioritization that also factors in dependencies and impacts of what is not chosen as priorities is subjective, which creates difficulty in strategizing releases effectively. RI-77	The Project's ability to identify future releases impacts development priorities.	Develop a product strategy driven by business priorities to show dependencies and how to build. Develop a more objective process that can quantify business value and level of difficulty, which also includes dependencies. A product decision making framework was approved by the Executive Leadership Team."

BUDGET/EXPENDITURES AS OF APRIL 17, 2019

2018-19 CWS-CARES Budget/Expenditure Report Summary

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OSI Spending Authority Budget Item	2018-19 Budget ¹	Actual Expenditures	Projected Expenditures	Total Actuals/ Projections		
Personnel Services*	9,935,256	3,211,349	4,303,783	7,515,132		
Other OE&E**	5,717,563	2,087,582	2,749,336	4,836,918		
Data Center Services**	2,660,543	2,575,283	1,001,985	3,577,268		
Contract Services**	52,831,244	22,449,269	13,507,764	35,957,033		
Enterprise Services*	5,420,394	984,937	703,526	1,688,463		
OSI Spending Authority Total	76,565,000	31,308,420	22,266,394	53,574,814		
CDSS Local Assistance Budget Item	2018-19 Budget	Actual Expenditures	Projected Expenditures	Total Actuals/ Projections		
Contract Services***	587,180	302,563	651,492	954,055		
Other OE&E***	3,492,074	-	2,170,410	2,170,410		
County Participation Costs***	19,157,746	335,418	1,150,000	1,485,418		
CDSS Local Assistance Total	23,237,000	637,981	3,971,902	4,609,883		
CDSS State Operations Budget Item	2018-19 Budget	Actual Expenditures	Projected Expenditures	Total Actuals/ Projections		
Personnel Services****	1,930,359	1,437,029	493,330	1,930,359		
Facilities****	568,000	16,451	551,549	568,000		
Other OE&E****	224,497	18,051	206,446	224,497		
CDSS State Operations Total	2,722,856	1,471,531	1,251,325	2,722,856		
CWS-CARES Project Total	102,524,856	33,417,932	27,489,621	60,907,553		

¹ 2018-19 Budget reflects amount in FY 2019-20 Governor's Budget

Note: The adjustments to the OSI line item spending authority were made to better align with the Project's focus of one product feature set at a time.

^{*} Actuals through January 2019 per FI\$Cal Report

^{**} Actuals from January 2019 Fi\$CAL Reports, in addition to processed invoices through April 17, 2019

^{***} Actuals from CDSS as of December 2018

^{****} Actuals through February 2019 per CalSTARS Report